

The claims defining the invention are as follows:

1. A method of delivering a substance into a cellular organism, the method comprising the steps of:

5 providing the substance in an ionised aerosol form at a delivery region of the organism; and

applying magnetic energy to the delivery region to effect enhanced delivery of the ionised aerosol substance to the cellular organism.

2. A method as defined in claim 1 wherein the application of magnetic energy is effected by applying a pulsed magnetic field.

- 10 3. A method as defined in claim 2 wherein the pulsed magnetic field is asymmetric.

4. A method of delivering a substance into a cellular organism, the method comprising the steps of:

providing the substance in a liquid or cream form at a delivery region of the organism;

- 15 applying ultrasonic energy to the delivery region to enhance delivery of the cream or liquid substance to said organism; and

simultaneously applying magnetic energy and electrical energy to the delivery region to effect delivery of the cream or liquid substance to the cellular organism.

- 20 5. A method as defined in claim 4 wherein the application of ultrasonic energy to said organism to enhance delivery is promoted by opening of pores of the organism.

6. A method as defined in any one of the preceding claims wherein the ultrasonic and magnetic energies are applied simultaneously.

- 25 7. A method as defined in any one of the preceding claims wherein the application of ultrasonic, magnetic and/or electrical energy is effected by applying ultrasonic, magnetic and/or electrical fields, respectively.

8. A method as defined in claim 7 wherein the magnetic field is a pulsed magnetic field.
9. A device for delivering a substance into a cellular organism, the device comprising:
- 5 an aerosol delivery head for providing the substance in an ionised aerosol form at a delivery region of the organism;
- means for applying magnetic energy to the delivery region to effect enhanced delivery of the ionised aerosol substance to the cellular organism.
10. A device as defined in claim 9 wherein the aerosol delivery head provides a sealed compartment about the delivery region.
- 10 11. A device as defined in either of claims 9 or 10 also comprising a nebulizer being operatively coupled to the aerosol delivery head.
12. A device as defined in Claim 11 wherein the nebulizer includes:
- a container being adapted to contain a liquid to be nebulized.
- a tubular energy transmitter having one end immersed in the liquid of the container
- 15 and an opposite end positioned clear of the liquid; and
- an energy source being operatively coupled to the container or the tubular energy transmitter for nebulization of the liquid and being arranged for transmission of energy to the liquid or tubular energy transmitter whereby in operation the transmitted energy forces the liquid toward the opposite end of the tubular energy
- 20 transmitter where it is nebulized in the form of the aerosol.
13. A device as defined in claim 12 wherein the energy transmitter is positioned so that said one end is adjacent the bottom of the liquid.
14. A device as defined in either of claims 12 or 13 wherein the energy transmitter is arranged to allow formation of high frequency vibrations in its wall(s) upon
- 25 emission of the energy, the high frequency vibrations effecting aerosol formation at the liquid surface at or adjacent the opposite end of the energy transmitter.

15. A device as defined in any one of Claims 12 to 14 wherein the nebulizer also includes an aerosol tube coupled to the opposite end of the tubular energy transmitter and having a cross-sectional area such that the static pressure of the aerosol within the aerosol tube induces a pressure drop along the aerosol tube which alone is sufficient to propel the nebulised aerosol through the aerosol tube.
- 5
16. A device for delivering a substance into a cellular organism, the device comprising:
- means for generating ultrasonic energy being adapted to cooperate with a delivery region of the organism to enhance delivery of the substance in a cream or liquid form to said organism;
- 10 means for simultaneously applying magnetic energy and electrical energy to the delivery region to effect delivery of the cream or liquid substance to the cellular organism, said ultrasonic generating means being operatively coupled to the magnetic and electrical energy means whereby a synergistic effect is provided by the combination of said means.
- 15 17. A device as defined in claim 16 wherein the means for applying magnetic energy is in the form of a pulsed magnetic generator.